

Application No. 10/008,960
Docket No. 3634-25

This listing of claims will replace all prior versions, and listings, of claims in this application. The claim numbering is that used in the last Examiner's Amendment dated June 15, 2004 where Claims 22 to 39 were renumbered as Claims 1 to 18. Original Claims 1 to 21 were cancelled by the Preliminary Amendment filed April 2, 2004 when new claims 22 to 39 were presented. No claims have been cancelled by this Amendment or the Examiner's Amendment.

Claims 1-21 (cancelled)

Claim 1. (renumbered Claim 22 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fusion protein, which protein comprises (i) an SDI-1 protein comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2 or a fragment thereof and (ii) a hinge region of at least the amino acids depicted in SEQ ID NO:9, which fusion protein is capable of inhibiting DNA synthesis in a recipient cell.

Claim 2. (renumbered Claim 23 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fusion protein [[having the]] encoded by a coding sequence [[of]] comprising the cDNA insert of the plasmid contained in ATCC Deposit 69597.

Claim 3. (renumbered Claim 24 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 protein or an SDI-1 fusion protein comprising the amino acid sequence depicted in SEQ ID NO: 2.

Claim 4. (renumbered Claim 25 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to [[the]] an SDI-1 protein encoded by SEQ ID NO: 1.

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Claim 5. (renumbered Claim 26 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 protein [[having the]] encoded by a coding sequence [[of]] comprising the cDNA insert of the plasmid contained in ATCC Deposit 69081.

Claim 6. (renumbered Claim 27 currently amended) A monoclonal antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to a an SDI-1 protein or a an SDI-1 fusion protein comprising at least the amino acid sequence [[of]] depicted in SEQ ID NO: 2

Claim 7. (renumbered Claim 28 currently amended) A monoclonal antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to:

- a) a protein [[having the]] encoded by a coding sequence [[of]] comprising the cDNA insert of the plasmid contained in ATCC Deposit 69081;
- b) a fusion protein [[having at least the]] encoded by a coding sequence [[of]] comprising the cDNA insert of the plasmid contained in ATCC Deposit 69081;
- c) a ~~fusion protein encoded by a sequence~~ consisting of the ~~coding sequence~~ the amino acid sequence depicted in SEQ ID No: 2; or
- d) a fusion protein encoded by a coding sequence consisting of the ~~coding sequence~~ of the cDNA insert of the plasmid contained in ATCC Deposit 69597.

Claim 8. (renumbered Claim 29 currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fragment comprising in the fragment at least amino acids 1 to 71, 1 to 82, 1 to 123, 16 to 52, 42 to 47, 42 to 58, 42 to 71, 48 to 65, 49 to 53, 52 to 71, 53 to 58, 58 to 61, or 66 to 71 as depicted in SEQ ID NO: 2.

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Claim 9. (renumbered Claim 30 currently amended) The SDI-1 antibody of Claim [[29]] 8, wherein the SDI-1 fragment comprises in the fragment amino acids 42 to 47, 42 to 58, 52 to 71, or 53 to 58.

Claim 10. (renumbered Claim 31 currently amended) A continuous cell line prepared by fusing a tumor cell with an antibody-producing cell derived from a mouse immunized with a protein which is a senescent cell-derived inhibitor, SDI-1, comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2, or a fragment thereof.

Claim 11. (renumbered Claim 32 currently amended) A continuous cell line which produces a monoclonal antibody specific for a protein which is a senescent cell derived inhibitor, SDI-1, comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2, or a fragment thereof, wherein the continuous cell line is prepared by fusing a myeloma or plasmacytoma cell with a splenic leukocyte or splenocyte derived from a mouse immunized with an SDI-1 protein or fragment thereof.

Claim 12. (renumbered Claim 33 currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the myeloma cell with the splenic leukocyte.

Claim 13. (renumbered Claim 34 currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the myeloma cell with the splenocyte.

Claim 14. (renumbered Claim 35 currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the plasmacytoma cell with the splenic leukocyte.

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Claim 15. (renumbered Claim 36 currently amended) The continuous cell line of Claim ~~[[32,]]~~ 11, wherein the hybridoma cell line is prepared by fusing the plasmacytoma cell with the splenocyte.

Claim 16. (renumbered Claim 37 previously amended) A composition which comprises the SDI-1 antibody of Claim 1, 2, 3, 4, 5, 8 or 9 in a pharmaceutically acceptable carrier.

Claim 17. (renumbered Claim 38 previously amended) A composition which comprises the SDI-1 monoclonal antibody of Claim 6 or 7 in a pharmaceutically acceptable carrier.

Claim 18. (renumbered Claim 39 currently amended) A process for detecting the presence of a protein which is a senescent cell-derived inhibitor, SDI-1 protein~~[[,]]~~ comprising the amino acid sequence ~~[[shown as]]~~ depicted in SEQ ID NO: 2, or a fragment thereof, which process comprises the steps of:

(a) contacting a sample with a soluble antibody to the SDI-1 protein or fragment thereof; and

(b) detecting the presence of the SDI-1 protein, or fragment thereof, bound to the antibody.